

## CLAIMS

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1. A method for varying the size of a plurality of icon images displayed in a display device based upon a user preference value, said method comprising the steps of:  
 storing icon data representative of a plurality of icon images;  
 selecting individual icons to perform variable icon sizing;  
 designating user preference values for each of the selected icons;  
 generating icon images of different respective sizes, wherein the different sizes of the icon images are based upon said user preference value; and  
 displaying said different sized icon images.

2. The method for varying the size of a plurality of icons of claim 1, wherein said generating step further comprises:  
 sorting icon images into an order based upon said designated preference values.

3. The method for varying the size of a plurality of icons of claim 2, wherein  
 said generating step further comprises:  
 calculating a size gap between said ordered icon images using the following equation:

$$(\text{max}-\text{min}) / (N-1),$$

where N is the number of applications given a preference, min is a minimum icon size and max is a maximum icon size.

4. The method for varying the size of a plurality of icons of claim 1, wherein said icon images of different respective sizes are located within a window.

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5. The method for varying the size of a plurality of icons of claim 1, further comprising the step of:

retrieving said icon image data from memory and scaling said icon image data in preparation for display on said display device.

6. A computer readable medium containing program instructions to:  
store icon data representative of a plurality of icon images;  
detect the selection of individual icons;  
obtain user preference values for each of the selected icons;  
generate icon images of different respective sizes, wherein the different sizes of the icon images are based upon said user preference value; and  
display said different sized icon images.

7. The computer readable medium of claim 6, further comprising instructions to:  
sort icon images into an order based upon said designated preference values.

8. The computer readable medium of claim 7, further comprising instructions to:  
calculate a size gap between adjacent icon image sizes using the following equation:  
$$(\text{max} - \text{min}) / (N - 1),$$
  
where N is the number of applications given a preference, min is the minimum icon size and max is the maximum icon size.

9. The computer readable medium of claim 6, wherein said different sized icon images are located within a window.

10. The computer readable medium of claim 6, further comprising instructions to:

retrieve said icon image data from memory and scale said icon image data in preparation for display.

11. An apparatus for varying a size of a plurality of icons images displayed in a window of a display device based upon a user preference value, said method comprising the steps of:

means for storing icon data representative of a plurality of icon images;

means for selecting individual icons for variable icon sizing;

means for designating user preference values for each of the selected icons;

means for generating icon images of different respective sizes, wherein the different sizes of the icon images are based upon said user preference value; and

display means for displaying said different sized icon images.

12. The apparatus for varying a size of a plurality of icons of claim 11, wherein said generation step further comprises:

sorting means for sorting icon images into an order based upon said designated preference values.

13. The apparatus for varying a size of a plurality of icons of claim 12, wherein said generating means further comprises:

calculating means for calculating a size gap between adjacent icon image sizes using the following equation:

$$(\text{max-min}) / (N-1),$$

where N is the number of applications given a preference, min is the minimum icon size and max is the maximum icon size.

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14. The apparatus for varying a size of a plurality of icons of claim 11, wherein said different sized icon images are located within a window.

15. The apparatus for varying a size of a plurality of icons of claim 11, further comprising:

retrieving means for retrieving said icon image data from memory and scaling said image data for display.

16. A method for varying the size of a plurality of icons based upon an object characteristic, comprising the steps of:

storing icon data representative of a plurality of icon images;

selecting individual icons for variable icon sizing;

5 determining said object characteristic with respect to each of a plurality of objects respectively associated with said selected individual icons;

generating icon images of different respective sizes representing said objects, wherein the size of an icon is determined by said object characteristic; and

10 displaying said different sized icon images representing said plurality of objects.

17. The method for varying the size of a plurality of icons of claim 15, wherein said generation step further comprises:

sorting icon images into an order based upon said object characteristic.

18. The method for varying the size of a plurality of icons of claim 17, wherein said generation means further comprises:

determining the size of said icon by:

associating a maximum sized icon image with an object having one extreme value for the object characteristic;

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20 associating a minimum sized icon image with an object having another extreme value for the object characteristic; and

assigning sizes to the remainder of said icon images with objects, in proportion to the objects associated with the maximum and minimum sized icons.

25 19. An apparatus for varying the size of a plurality of icons based upon an object characteristic, comprising the steps of:

storing means for storing icon data representative of a plurality of icon images;

selecting means for selecting individual icons to perform variable icon sizing;

30 determining means for determining said object characteristic with respect to each of a plurality of objects associated with said selected individual icons;

generating means for generating different sized icons representing said objects wherein said size of said icon is determined by said object characteristic of said objects; and

35 displaying means for displaying said variable sized icon images representing said plurality of objects.

20. The apparatus for varying the size of a plurality of icons of claim 19, wherein said generation step further comprises:

40 sorting means for sorting icon images into an order based upon said object characteristic.

21. The apparatus for varying the size of a plurality of icons of claim 19, wherein said generation means further comprises:

determining means for determining the size of said icon by:

45 associating a maximum sized icon image with an object having one extreme value for the object characteristic;

associating a minimum sized icon image with an object having another extreme value for the object characteristic; and

assigning sizes to the remainder of said icon images, in proportion to the objects associated with the maximum and minimum sized icons.

50           22.    A computer readable medium containing program instructions to:  
store icon data representative of a plurality of icon images;  
detect the selection of individual icons;  
determine said object characteristic with respect to each of a plurality of  
objects respectively associated with said selected individual icons;  
55           generate different sized icons representing said objects wherein the size  
of an icon is determined by said object characteristic; and  
display said different sized icon images representing said plurality of  
objects.

60           23.    A computer readable medium of claim 22, further containing program  
instructions to:  
sort icon images into an order based upon said object characteristic.

65           24.    A computer readable medium of claim 22, further containing program  
instructions to:  
determine the size of an icon by:  
associating a maximum sized icon image with an object having one  
extreme value for the object characteristic;  
associating a minimum sized icon image with an object having another  
extreme value for the object characteristic; and  
70           assigning sizes to the remainder of said icon images, in proportion to the  
objects associated with the maximum and minimum sized icons.

25. A method for varying the size of a plurality of icons images displayed in a container of a display device based upon a user preference value, said method comprising the steps of:

- 75 storing icon data representative of a plurality of icon images;  
 designating a user preference value for at least some of the plurality icon images located within the container;  
 generating different sized icon images, wherein the different sizes of the icon images are based upon said user preference value; and  
 displaying said different sized icon images.

26. The method for varying the size of a plurality of icons of claim 25, wherein said generation step further comprises:

sorting icon images into an order based upon said preference values.

27. The method for varying the size of a plurality of icons of claim 26, wherein said generating step further comprises:

calculating a size gap between said ordered icon images using the following equation:

$$(\text{max}-\text{min}) / (N-1),$$

where N is the number of applications given a preference, min is the minimum icon size and max is the maximum icon size.

28. The method for varying the size of a plurality of icons of claim 25, wherein said container is a window.

29. The method for varying the size of a plurality of icons of claim 25, further comprising the step of:

retrieving said icon image data from memory and scaling said icon image data in preparation for display on said display device.

30. A method for displaying a plurality of icons in a window on a display device, comprising the steps of:

storing icon data representative of a plurality of icon images;  
receiving a user command to display icons of varied sizes in said window; and  
displaying said icons with different relative sizes within said window.

31. The method of claim 30, wherein the different sizes of said icons are based upon an object characteristic.

32. The method of claim 30, wherein the different sizes of said icons are based upon a user preference value given to each of said icons.

33. A method for varying the size of a plurality of icon images displayed in a display device based upon a user designated size, said method comprising the steps of:

storing icon data representative of a plurality of icon images;  
selecting individual icons to perform variable icon sizing;  
designating a different respective icon size for each of the selected icons;  
generating icon images at sizes based on said designations; and  
displaying said different sized icon images.

34. The method of claim 33, wherein said different sized icon images are located within a window.

35. The method of claim 33, wherein said designating step comprises the indication of relative sizes for the selected icons.

36. The method of claim 33, wherein said designating step comprises the indication of absolute sizes for the selected icons.



37. An apparatus for varying a size of a plurality of icon images displayed in a display device based upon a user designated size, comprising:

means for storing icon data representative of a plurality of icon images;  
means for selecting individual icons to perform a variable icon sizing;  
means for designating an icon size for each of the selected icons;  
means for generating icon images at a size based on said designation; and  
means for displaying said different sized icon images.

38. The apparatus of claim 37, wherein said different sized icon images are located within a window.

39. A computer readable medium for varying the size of a plurality of icon images displayed in a display device based upon a user designated size, comprising instructions to:

store icon data representative of a plurality of icon images;  
detect the selection of individual icons;  
designate a respective icon size for each of the selected icons;  
generate icon images at sizes based on said designations; and  
display said different sized icon images.

40. The computer readable medium of claim 39, wherein said different sized icon images are located within a window.